ZyXEL

Powered by an ENERGY STAR® qualified adapter for a better environment

Energy-Saving Business NAS Server with Dual GbE LANs, Volume Encryption and Complete RAID/Snapshot Backup Solutions

- Storage Capacity of Up to 8 TB
- Dual Gigabit LAN Ports Support Failover/Load Balancing/Link Aggregation
- Volume Encryption with 256-bit AES
- Disk Configurations: JBOD, RAID0, RAID1, RAID5 and RAID10
- Snapshot Backup Helps Quickly Recover Previous Versions of Files
- Supports Encrypted Remote Replication, Local Backup and Self Volume to Volume Backup
- Energy-saving Low Power Consumption with ENERGY STAR Certified Power Adaptor
- Hot Spare and Hot Swappable

Network Storage Appliance

NSA-2401

Benefits

High Performance

To facilitate file sharing between different users or platforms, the ZyXEL NSA-2401 network storage appliance meets the need of small business users with outstanding performance and massive capacity designed for mission-critical storage management. Its 800 MHz-grade CPU, 256 MB DDR II memory and dual Gigabit LAN ports empower data reading/writing and network transmission performance outperforming the competition with the best price/performance ratio.

High Availability

In addition to typical RAID functionalities, the NSA-2401 provides a "hot spare" feature (RAID1 + Spare, RAID5 + Spare) to reduce down time in the event of driver failure. If any HDD failure occurs, the spare HDD in the NSA-2401 will automatically take over from the failed one and continue to function without corrupting the files, or interrupting regular NAS operations.

The NSA-2401 can also collaborate with an optional UPS device to protect files and databases from sudden power failures or surges. With the NSA-2401 monitoring the power level from the UPS (via USB) port, the IT staff can be informed of power failure or low UPS power level via e-mail in order to backup/save important data or shutdown the system safely in time. All these features ensure maximum device availability.

Easy Capacity Expansion

The IT staff can install cost-effective, low-capacity HDDs on the NSA-2401 for applications that require only a smaller capacity. When demand grows, the RAID5/JBOD online capacity expansion feature will allow capacity addition through simply installing extra HDDs.

Energy Saving for the Environment

More energy consumption means more carbon dioxide released into the atmosphere. To better protect the environment, the NSA-2401 consumes less power (only 58 W in access mode, 25 W in idle mode) with no compromise on performance. Compared to traditional NAS and storage servers (normally consuming 200 W), the NSA-2401 uses 60% less power to save energy as well as the electricity cost.

In off hours such as night time, weekends or holidays with low data traffic, the NSA-2401 can be scheduled to automatically perform power management according to specific date/time settings or idle time criteria for better power efficiency.

Enterprise-Class Backup Solutions

The NSA-2401 offers an integrated and enterprise-class backup and recovery solution to secure valuable files and databases to run the business smoothly with less risks of data-loss disaster. It equips with the most popular backup features used by enterprises today, including snapshoot, remote replication, local backup, instant/scheduled backup, PC client backup and Windows/SQL/Exchange server backup. With Snapshot backup, End-users can instantly recover a previous version of the file or folder.

To lower the TCO (Total Cost Ownership) an unlimited number of licenses of the Genie Backup Manager Lite software is bundled with the NSA-2401 and ZyXEL also provides one license for Genie Backup Manager Server software to backup your SQL/Exchange server databases. What used to be considered an expensive luxury has now been made affordable for small business owners by ZyXEL.

Easy Recovery with Snapshot Backup

The IT staff routinely spends a considerable amount of time and resources dealing with data backup operations; worse yet, the time needed to backup Terabytes or more of data on traditional tape or disks may becomes a serious headache when facing limited time and resources. To solve this, ZyXEL presents Snapshot Backup technology.

The Snapshot Backup function creates special "Snapshot" folders in the file system at preset time intervals. The folders allow users to access files of previous versions anytime when needed, and Snapshot folders can also be browsed and accessed like regular ones. To restore a previous file, simply copy it from the Snapshot folders. It's easy and fast.

Most Secure Volume Encryption

Important business files and databases should be securely stored or transmitted to prevent unauthorized access. Hacked or leaked critical information in the wrong hands may jeopardize confidential information such as financial data, projects in development or sensitive customer information.

In addition to secure FTP/S and HTTP/S file transmission methods, the NSA-2401 also guards the system with Volume Encryption. Volumes or disks can be encrypted with the robust 256-bit AES algorithm; only authorized personnel with the right password or USB key can access the encrypted data.

Easy Setup, Low Maintenance

Web-based device and disk setup Wizards can help non-technical users setup the NSA-2401 in merely 10 minutes. For first-time installation, the NSA-2401 Discovery Utility also helps with locating and managing the device's IP address without changing the TCP/IP configuration.

The "S.M.A.R.T." feature provides complete HDD information. This helps the IT staff pinpoint potential or critical disk issues and to prevent HDD failures or critical data loss in advance.

Complete logs features, such as event log and Syslog, help the IT staff keep an eye on the system status, access histories and connection status. Should any critical incident occur, the IT staff will be notified by emails and a buzzer will be activated immediately to warn the on-site personnel.

Specifications

System Specifications

Networking

- Network protocol
  - CIFS/SMB, NFS (for Linux/Unix)
  - FTP, HTTP, DFS (Distributed File System)
- Network settings
  - DHCP client
  - Static IP
  - NTP with daylight saving option

OS & File System

- Embedded OS: Linux 2.6
- External HDD: EXT2/EXT3, FAT32, NTFS, XFS (Journal file system)
- Internal HDD: XFS

Security Feature

- Encrypted network login
- FTP/S
- HTTP/S
- Volume encryption with AES-256
- Encrypted NSA to NSA network backup with security
- Access control by users or groups

LAN Feature

- Dual Gigabit LAN
  - 10/100/1000 Mbps Auto-MDIX
  - Failover
  - Link aggregation (IEEE 802.3ad compliant)
  - Load balancing
  - Jumbo frame up to 9K bytes

Backup Feature

- Snapshot backup
  - Snapshot scheduler
  - Snapshot rollback
  - Snapshot space automatically expansion
- Remote replication
  - Instant/Schedule backup manager
  - NSA to NSA archive/full backup
  - NSA to NSA incremental backup
  - NSA to NSA synchronization backup (publish/mirroring)
  - Backup task bandwidth control
- Local backup
  - Local volume to volume backup
  - Backup to USB disk
  - Programmable backup button
  - Recycle Bin
- Compatible backup utilities
  - Genie Backup Manager Lite® (Free bundled with unlimited license)
  - Genie Backup Manager Server® (Free bundled with one license)

RAID/DISK Feature

- RAID level
  - JBOD (Just Bundle of Disk)
  - RAID0 (Striping)
  - RAID1 (Mirroring)
  - RAID1 (Mirroring + Spare)
  - RAID5 (Striped Set with Parity)
  - RAID5 (Striped Set with Parity + Spare)
  - RAID10 (Stripe of Mirrors)
- Hot spare
  - A spare hard drive as hot spare in case of disk failure
- Online expansion
  - Online Expansion (JBOD/RAID5) with larger drives capacity
- Disk maintenance
  - Self-Monitoring, Analysis & Reporting Technology (S.M.A.R.T)
  - Automatically disk bad block scanning

USB Application

- Support Max two USB printer servers (by CIFS protocol)
- Support external USB HDD
- Support memory stick and card reader
- Support USB UPS power monitoring and auto shutdown

Power and Thermal Management

- Power control
  - Idle mode
  - Scheduled startup/shutdown/reboot
  - Automated power on after power failure
- Thermal management
  - Automatically fan speed control according to temperature of internal chassis
  - Fan failure alert/buzzer
  - Email alert while high temperature
  - Auto shutdown while high temperature

Management

- User & Group Management
  - Max user accounts: 512
  - Max groups: 32
  - Max share folders: 100
  - Concurrent connection: 64
  - MS Active Directory Service (ADS)
  - NTv4 domain
  - Quota assignment per user
- Reset button
  - Reset IP address and password to default
  - Reset all device settings to default, but all the data in HDD remains
- Device and disk setup
  - Web-Based wizard for device setup and disk setup
  - NSA discovery utility
  - Online help on each page

System Tools

- System maintenance
  - System resource, session, status monitoring
  - System configuration backup and restore
  - Firmware upgrade
- Alarm/Buzzer
  - System alert and health notification
- Logs
  - Syslog
  - Event logs
  - Acton logs for read/write files, create/delete directory
- Browsers supported
  - IE 6.0+, Safari 3.0+, Firefox 2.0+
- Multilingual support
  - English, French, Germany, Italian, Traditional-Chinese
- Supported OS for Genie Backup Manager Lite®
  - Windows® Vista/XP/2000/98/SE
- Supported OS for Genie Backup Manager Server®
  - Windows® 2000/2003 Server

Hardware Specifications

- Processor: Freescale 8543 800 Mhz
- Memory
  - 256 MB Flash
  - 256 MB DDR II SDRAM
- Drive bays
  - Up to 4 internal HDDs
  - Both SATA and SATA II interface supported
  - Hot swappable
- LAN port
  - 2 x Gigabit RJ-45 Ethernet port
  - IEEE 802.3ab compliant
  - IEEE 802.3ad compliant
  - IEEE 802.3u compliant
  - IEEE 802.3 compliant
- USB
  - 2 x USB 2.0 high speed
  - Type A female connector
- Buttons
  - Power button
  - Auto-copy button
  - Reset button
- Smart fan: 2 x chassis Fan
- Buzzer: System warning
- Power consumption
  - Idle mode: 25 W (with 4 x 250 GB HDD)
  - Access mode: 58 W (with 4 x 250 GB HDD)
- Power supply
  - Input: AC 100 ~ 240 V
  - Output: DC 19 V

Physical Specifications

- Unit weight: 6.2 kg (13.7 lb)
- Unit dimensions:
  140 (W) x 300 (D) x 305 (H) mm
  (5.51 (W) x 11.81 (D) x 12 (H) inch)
- Packing weight: 9 kg (19.84 lb)
- Packing dimensions:
  440 (W) x 440 (D) x 276 (H) mm
  (17.32 (W) x 17.32 (D) x 10.86 (H) inch)

Environmental Specifications

- Operating temperature: 0°C ~ 40°C/
  32°F ~ 104°F
- Storage temperature: -30°C ~ 60°C/
  -22°F ~ 140°F
- Operating humidity: 20% ~ 90%, RH
  (non-condensing)
- Storage humidity: 20% ~ 95%, RH
  (non-condensing)

Certification

Safety

- UL 1950
- CSA C22.2 No. 950
- EN60950, EN41003

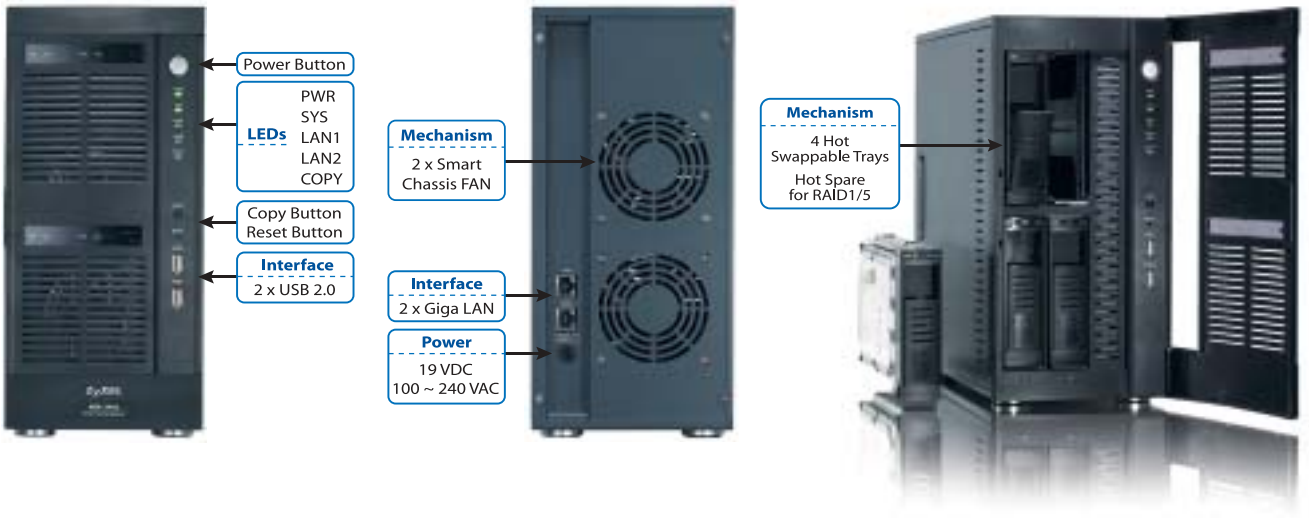
EMC

- FCC Part 15 Class B
- EN 55022 Class B

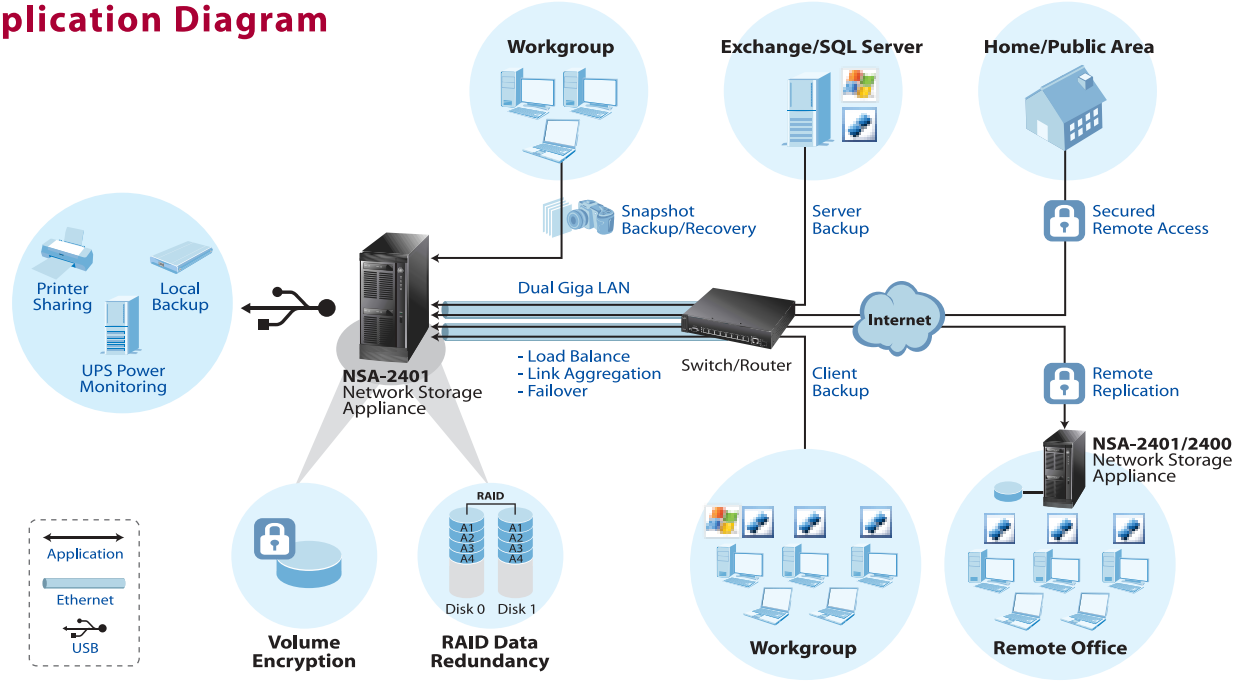
Power Adapter

- CEC Efficiency Level V
- ENERGY STAR EPS specification 2.0

Product Introduction



Application Diagram



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